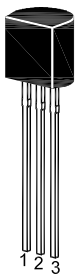
ST 2SA708

PNP Silicon Epitaxial Planar Transistor

for medium speed switching and low frequency amplifier applications.

The transistor is subdivided into three groups, R, O and Y according to its DC current gain.



1. Emitter 2. Base 3. Collector
TO-92 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	80	V
Collector Emitter Voltage	$-V_{CEO}$	60	V
Emitter Base Voltage	$-V_{EBO}$	8	V
Collector Current	$-I_C$	700	mA
Collector Power Dissipation	P_{tot}	800	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 2 V, $-I_C$ = 50 mA	Current Gain Group R	h_{FE}	40	-	80	-
	O	h_{FE}	70	-	140	-
	Y	h_{FE}	120	-	240	-
Collector Base Cutoff Current at $-V_{CB}$ = 60 V		$-I_{CBO}$	-	-	0.1	µA
Emitter Base Cutoff Current at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	-	0.1	µA
Collector Base Breakdown Voltage at $-I_C$ = 100 µA		$-V_{(BR)CBO}$	80	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 10 mA		$-V_{(BR)CEO}$	60	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 100 µA		$-V_{(BR)EBO}$	8	-	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 50 mA		$-V_{CEsat}$	-	-	0.7	V
Base Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 50 mA		$-V_{BEsat}$	-	-	1.1	V
Current Gain Bandwidth Product at $-V_{CE}$ = 10 V, $-I_C$ = 50 mA		f_T	-	50	-	MHz
Output Capacitance at $-V_{CB}$ = 10 V, I_E = 0, f = 1 MHz		C_{ob}	-	13	-	pF

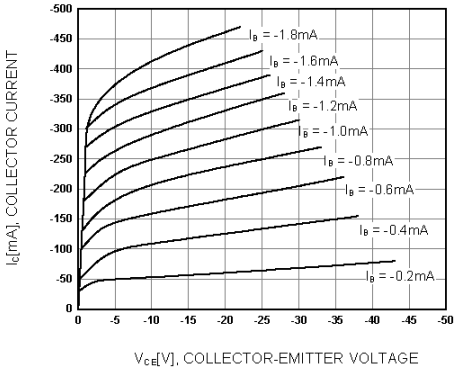


Figure 1. Static Characteristic

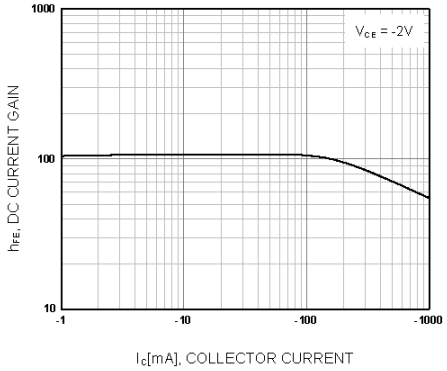


Figure 2. DC current Gain

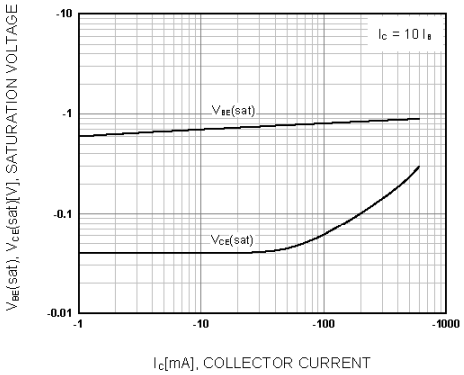


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

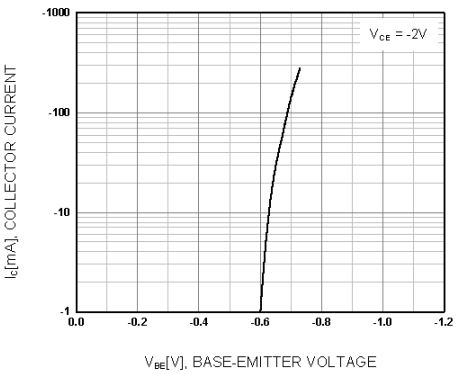


Figure 4. Base-Emitter On Voltage

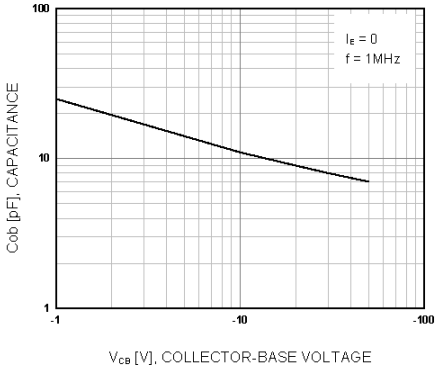


Figure 5. Collector Output Capacitance